

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-14. Canceled

15. (Currently Amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1,~~ wherein the device matrix establishes an at least partially bioresorbable scaffold adapted for ingrowth of fibrochondrocytes.

16-27. Canceled

28. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones, wherein the device is a prosthetic ligament comprising a plurality of substantially aligned, elongated filaments ~~The device of claim 25,~~

- (a) wherein the fibrils are present in the matrix at a concentration of about 75 to 100% by dry weight, and
- (b) wherein polysaccharide molecules in the matrix are present at a concentration of about 0 to 25% by dry weight.

29. Canceled

30. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's

bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1,~~ wherein the device is a prosthetic articular cartilage device adapted to have an *in vivo* outer surface contour substantially the same as that of natural articular cartilage.

31. Canceled

32. Canceled

33. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones, wherein the matrix material comprises collagen fibers ~~The device of claim 32, wherein the collagen is selected from the group consisting of Type I collagen, Type II collagen, and a combination thereof.~~

34. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1,~~ wherein the matrix material comprises polysaccharides.

35. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1,~~ wherein the matrix material comprises glycosaminoglycan (GAG) molecules.

36-38. Canceled

39. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1,~~ wherein the device matrix has a density of about 0.07 to 0.50 gram. matrix per cubic centimeter.
40. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1,~~ wherein the device matrix has a density of about 0.10 to about 0.25 gram matrix per cubic centimeter.
41. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1,~~ wherein the device matrix has an intrafibrillary and interfibrillary space of about 2 to 25 cubic centimeters per gram matrix material.
42. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device~~

of claim 1, wherein the device matrix has an intrafibrillary and interfibrillary space of about 2 to 14 cubic centimeters per gram matrix.

43-46. Canceled

47. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1, wherein the matrix material is polyethylene glycol-treated.~~

48-55. Canceled

56. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1, further comprising a mesh surrounding the device matrix, the mesh being absorbable and nonimmunogenic.~~

57. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones, wherein the device is a prosthetic articular cartilage device adapted to have an *in vivo* outer surface contour substantially the same as that of natural articular cartilage ~~The device of claim 30, further comprising a biocompatible conical base component including an anchor for anchoring the articular cartilage device in a complimentary aperture in~~

cancellous bone, the base component extending from portions of the outer surface of the matrix.

- 58. (Original) The device of claim 57, wherein the base component is at least partially resorbable.
- 59. (Original) The device of claim 57, wherein the base component includes a plurality of circumferentially extending ridges.
- 60. (Original) The device of claim 57, wherein the base component is composed of a composite material, comprising:
 - (a) a dispersion of collagen and a
 - (b) composition which is selected from the group consisting of tricalcium phosphate, hydroxyapatite, and a combination of tricalcium phosphate and hydroxyapatite.
- 61. (Original) The device of claim 60, wherein the dispersion comprises about 90% by weight tricalcium phosphate and about 10% by weight collagen.
- 62. (Original) The device of claim 60, wherein the dispersion comprises about 90% by weight hydroxyapatite and about 10% by weight collagen.
- 63- 87. Canceled